

**CRAB ORCHARD NATIONAL WILDLIFE REFUGE CERCLA PROJECT
MONTHLY PROGRESS REPORT
FEBRUARY 2018**

**ADDITIONAL AND UNCHARACTERIZED SITES
OPERABLE UNIT (AUS OU)**

1.0 Actions toward Achieving Compliance

Feasibility Study (FS).

FWS continues to provide technical direction to Shannon and Wilson Inc. (SWI) on the draft FS. FWS continued to work on written responses to Agency comments received on the draft pilot, October, 2017 and share general concepts of its response with the Agencies. The draft pilot includes a comparative analysis of alternatives for AUS Sites 0001, 0002, 0060, and 0A2B and technical memoranda attached as appendices. The draft FS is targeted for completion summer of 2018.

*Natural Attenuation in Groundwater Work Plan and Quality Assurance Project Plan (QAPP)
Addendum.*

Review of the preliminary data for the volatile organic constituents and carbon isotope data support degradation occurred in several wells. The results will be used to further inform alternative analysis in the FS. The remaining samples for TCE cometabolism samples will be collected when the lab re-opens in March 2018.

Sewer Line Vapor Threat Evaluation of Area 11.

The findings suggest that the abandoned sewer line in Area 11 may function as a preferential migration pathway for contaminated groundwater and even perhaps create orphaned plumes. FWS continues to evaluate available information and the findings to assess the next steps.

Area 8 Copper Site

The pond is contaminated with dissolved copper from buried waste in a dump along the shoreline and beneath the water. The concentrations of copper can exceed water quality criteria for the protection of aquatic life with sufficient water retention period, but not above human health standards. There is a threat that the pond in Area 8 South discharges surface water through a culvert or overflows a low spot of the road under heavy rain events or high water levels into the creek. Surface water samples will be collected at a monthly interval and tested for dissolved copper at locations near the culvert that discharges into the creek and where it overflows the low spot of the road.

Draft Evaluation of Future Groundwater Risk

The results of the evaluation indicated risks for human and ecological receptors related to potable and non-potable uses. FWS continued to work on written responses to Agency comments. The revised assessment and written responses to USEPA, USACE, and IEPA comments are expected to be completed in March.

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Site 0001

FWS is preparing a technical memo evaluating whether Site 0001 should remain in the FS, because the single elevated concentration of arsenic could not be repeated.

2.0 Status/Results of Sampling, Tests, and Other Data

Groundwater samples collected the week of January 1st are pending.

3.0 Actions Scheduled for Next Month

- Evaluate results of monitored natural attenuation bench study.
- Review and respond to agency comments submitted on Future Groundwater Evaluation of Risks, draft pilot FS, and technical memos.
- Continue to provide technical direction to S&W on preparation of the FS.
- Explore options for management or containment of surface water at Area 8 Copper Pond.
- Conduct surface water sampling at Area 8 Copper Pond.
- Collect remaining groundwater samples for monitored natural attenuation study.

4.0 Modification or Delays Encountered or Anticipated

Completion of the draft FS will proceed per the AUS OU SOW and is targeted for 2018. The draft FS will incorporate the results of the monitored natural attenuation bench study.

5.0 Other Significant Activities

None to report.

6.0 Personnel Changes

None to report.

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AREA 7 PESTICIDES SITE

1.0 Actions toward Achieving Compliance

EE/CA Report

The Final EE/CA was submitted January 5, 2018.

Public Involvement Activities

The thirty-day public comment period on the EE/CA closed February 5, 2018. One written comment supporting the off-site disposal alternative was received at the public meeting on January 24th.

Action Memorandum

FWS is preparing an Action Memo which considers the information presented in the EE/CA, public comment, State support, and Agency comments. The preferred alternative consisting of demolition of four warehouses, excavation of soils, and off-site disposal of building materials and soils to a permitted landfill is supported by the community, State, and the Agencies.

Draft Remedial Design/Removal Action (RD/RA) Work Plan

FWS continues to provide technical direction to TRC on planning the non-time critical removal action. Weekly coordination calls are held to discuss planning and details of the removal action pending receipt of the action memo. TRC submitted an EE/CA Work Plan Addendum for Tree Clearing and RD Soil Sampling under the existing Administrative Order on Consent and the draft RD/RA Work Plan for FWS review on February 21st. TRC proposes to complete the tree clearing work prior to the bat roosting season beginning April 1st.

2.0 Status/Results of Sampling, Tests, and Other Data

None to report.

3.0 Actions Scheduled for Next Month

- Complete the Action Memo.
- Review the draft EE/CA Work Plan Addendum and draft RD/RA Work Plan.
- Continue coordination and planning for the RD/RA
- Complete Tree Clearing Work.

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4.0 Modification or Delays Encountered or Anticipated

None to report.

5.0 Other Significant Activities

None to report.

6.0 Personnel Changes

None to report.

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PCB OPERABLE UNIT

1.0 Actions toward Achieving Compliance

Operations and Maintenance

Operations and monitoring for the Plume One pump and treatment system continued without any down time. The average flow through the system was 2.8 gallons per minute for February. No PCBs were detected in the effluent.

Plume Two Remedial Design

The consent decree amendment for the Plume Two interim remedy is under review by U.S. Department of Justice.

2.0 Status/Results of Sampling, Tests, and Other Data

None to report.

3.0 Actions Scheduled for Next Month

The annual long term monitoring (LTM) sampling event for Plumes One and Three is scheduled for the first week in April.

4.0 Modification or Delays Encountered or Anticipated

None to report.

5.0 Other Significant Activities

The Plumes One and Three operations and maintenance (O&M) plan including the LTM program and the related QAPP package are being updated to reflect the shift of lead role from Schlumberger to FWS.

6.0 Personnel Changes

Leanne Moore obtained the industrial Class K wastewater operator certification. Ms. Moore will take over the lead role from Chuck Beasley for the Plume One O&M and LTM during fiscal year 2019.